US ERA ARCHIVE DOCUMENT

# Nonroad Input and Emissions Data Submission

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### EIS vs NEI

- Emission Inventory System (EIS)
  - Data repository for air emissions data used to create the NEI
  - Contains State, Local, Tribal and EPA submitted data
  - Can store multiple emissions values for the same unit/process
  - Can store annual, monthly, daily data (e.g., fires, events)
  - Data available via a password-protected web site
    - EIS Gateway <a href="https://eis.epa.gov/eis-system-web/welcome.html">https://eis.epa.gov/eis-system-web/welcome.html</a>
- National Emission Inventory (NEI)
  - Snapshot in time from EIS
  - Inventory version shared with the public
  - One emissions value per process selected
  - Annual emissions values

# S/L/T Reporting Requirement

- Air Emissions Reporting Rule (AERR) <a href="http://www.epa.gov/ttn/chief/aerr/">http://www.epa.gov/ttn/chief/aerr/</a>
  - Complete criteria pollutant inventory every 3 years
    - All point sources (100 tpy potential to emit threshold)
    - Nonpoint Sources
    - Onroad and Nonroad sources
    - Events (wildfires and prescribed fires)
    - 2011 Emissions due 12/31/2012, EIS window opens 6/1/2012
  - Annual reporting for type A point source facilities
    - SO2, NOx, CO with potential to emit ≥ 2,500 tpy
    - VOC, PM, NH3 with potential to emit  $\geq$  250 tpy
    - Pb with potential to emit <u>> 5</u> tpy (to be amended to agree with Lead NAAQS level of <u>> 0.5</u> tpy)
  - HAPs are submitted voluntarily by many S/L/Ts and are encouraged as part of an integrated report

### Uses of the NEI

- The NEI is one of the key inputs for :
  - Modeling of national rules
    - NAAQS reviews, CSAPR, etc
  - Non-attainment Designations
  - NATA Review toxics risk modeling
  - Trends reports and analyses

### Components of the EIS

- Six different data categories
  - Facility Inventory
  - Point Emissions
  - Nonpoint Emissions
  - Onroad Emissions
  - Nonroad Emissions
  - Event Emissions (wildfires and prescribed fires)
  - No biogenic emissions, although these are part of EPA's modeling files

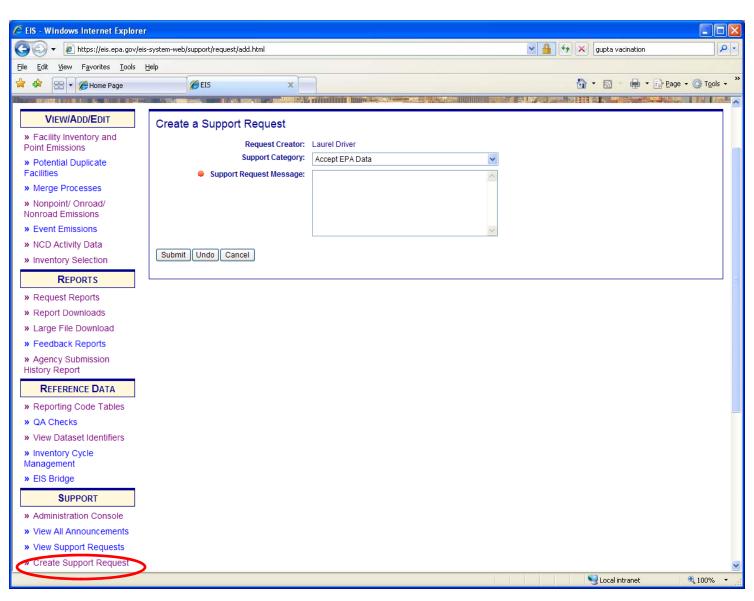
### Nonroad Submissions

- Emissions in NEI must be from an EPAapproved model
  - NONROAD (EPA)
  - Off-Road (California)
- EPA strongly encourages submittals of National Mobile Inventory Model (NMIM) National County Database (NCD) rather than emissions
- Tribes and CA should submit emissions

# Why Inputs?

- EPA prefers to receive activity data instead of emissions as they allow for more in-depth analysis and consistent, integrated emissions in the NEI. If you do not submit nonroad input data, EPA will generate emission estimates using national defaults.
- EPA will provide a set of default nonroad inputs for agencies to review/ customize as desired
- Agencies may accept EPA defaults in lieu of submittals by sending a "support request" to EIS that states this.
- To the extent resources allow, EPA will assist agencies to build their submittals.

# Support Request



### Calculation of Emissions

- Why is EPA using NMIM?
  - NMIM runs the NONROAD model, and produces CAP and HAP results with common inputs
  - The EIS process to accept NCDs is in place and is the least resource intensive way to proceed until MOVES includes nonroad

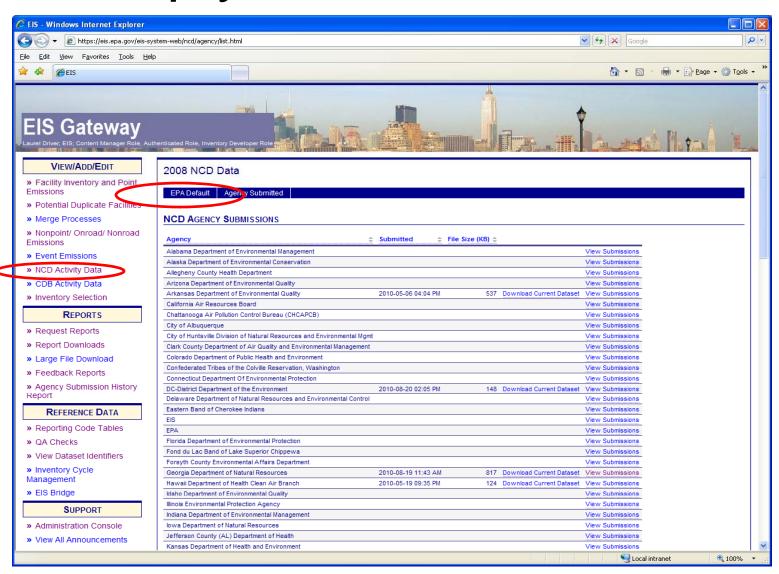
### Summary of NCDSubmittal Steps

- Got to 2011NEI web page for instructions on onroad and nonroad input submittal instructions
- Pick up your draft default NCD from EIS
- Make changes and keep a complete NCD set
- Compile Submission:
  - 1. Folder of tables in .csv
  - 2. Folder of External Files
  - 3. .txt file with documentation
- EACH SUBMITTAL IS A COMPLETE REPLACEMENT OF PREVIOUS SUBMITTALS!

# County vs State Submissions

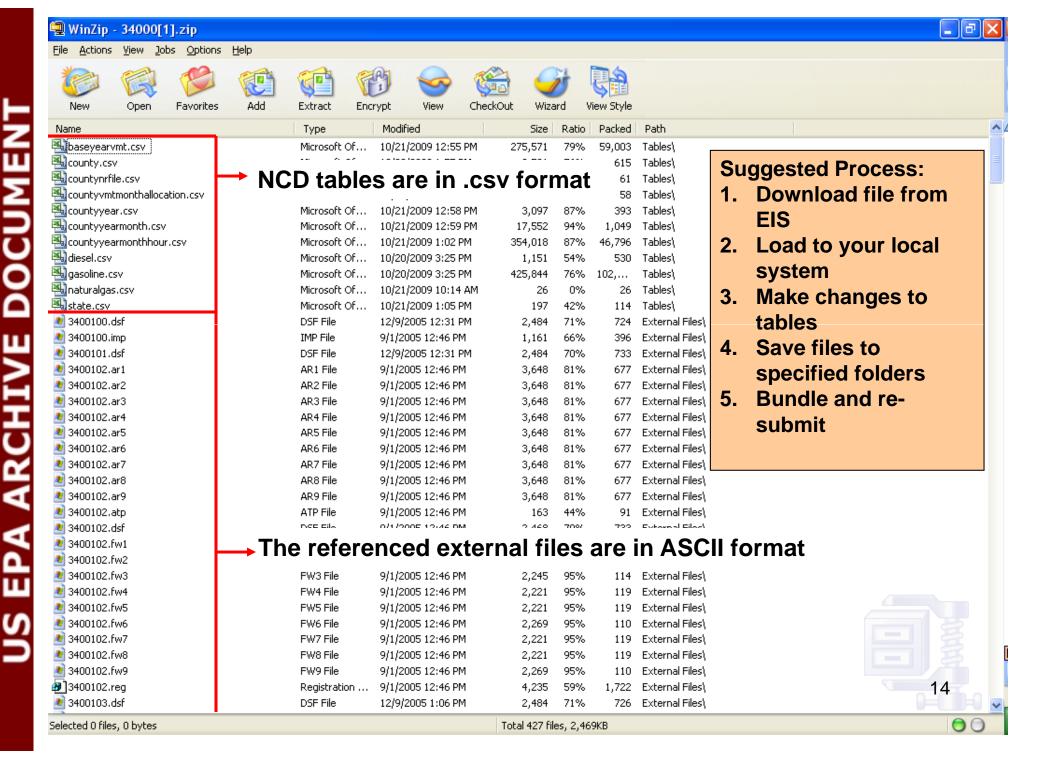
- Encouraged to submit all activity data in a single submission
- Permitted to send one county file vs a complete State file
- NOT permitted to send a group of counties
  - NMIM can not accommodate county groups or Tribes

# Pick up your draft default NCD

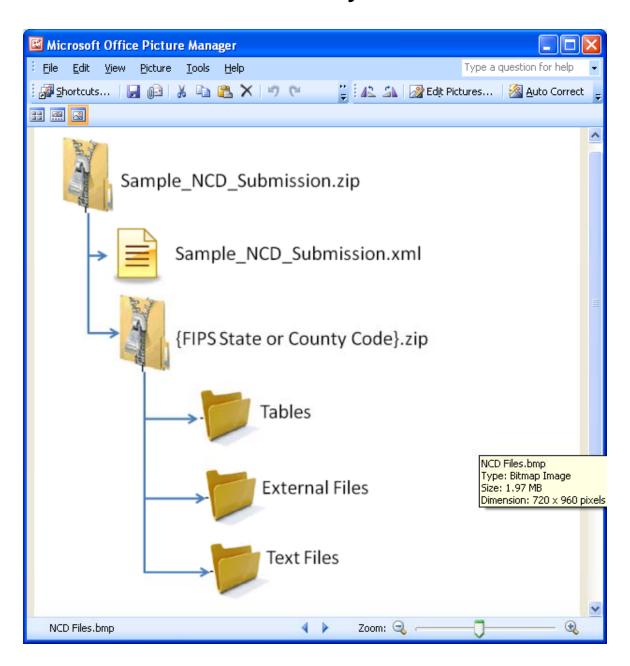


### Nonroad NCD

- Tables included in download (blue ones are for nonroad)
  - baseyearvmt
  - county
  - countynrfile
  - countyvmtmonthallocation
  - countyyear
  - countyyearmonth
  - countyyearmonthhour
  - diesel
  - gasoline
  - naturalgas
  - state
- Preferred method
  - EPA to use NMIM
  - more in-depth analysis
  - consistent, integrated calculated emissions in the NEI
- EPA will provide default data
  - SLT can provide revised input NCD data
- Tribes and NCD Activity Tables
  - Can not accommodate Tribal lands, but tribes can use neighboring county NCDs for help with inputs
  - Submit emissions
- Can not submit NONROAD input files
- To the extent resources allow, EPA will provide assistance in building NCDs for submittal



#### How to Bundle Your NCD Activity Data for Re-Submission



# Creating XML HEADER

- 2 ways
  - Using staging tables
    - CERS and ExchangeHeader tables only -currently under revision
  - Edit XML available from 2011 NEI page

### Creating XML Header

- In the Nonroad staging table:
  - Complete the CERS table
    - User Identifier Your EIS login (email address)
    - Program System Code
    - Emission Year
  - Complete the Exchange Header table
    - Author Name Your full name
    - Organization Name
    - Document Title "EIS"
    - Data Flow Name "EIS\_v1\_0"
    - Property-Submission Type QA or PRODUCTION
    - Property-Data Category –NONROAD
    - Property-NCD Data File the name of your zipped data file.

### Editing XML text

```
<hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
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 <hdr:Header>
  <hdr:AuthorName>Your Name</hdr:AuthorName>
  <hdr:OrganizationName>Your Organization</hdr:OrganizationName>
  <hdr:DocumentTitle>EIS</hdr:DocumentTitle>
  <hdr:CreationDateTime>2012-04-10T14:02:39</hdr:CreationDateTime>
  <hdr:Keywords></hdr:Keywords>
  <hdr:Comment></hdr:Comment>
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   <hdr:PropertyValue>QA</hdr:PropertyValue>
  </hdr:Property>
  <hdr:Property>
   <hdr:PropertyName>DataCategory</hdr:PropertyName>
   <hdr:PropertyValue>Nonroad</hdr:PropertyValue>
  </hdr:Property>
                  <hdr:PropertyName>NCDDataFile</hdr:PropertyName>
  <hdr:Property>
  <hdr:PropertyValue>Sample submission file.zip</hdr:PropertyValue>
  </hdr:Property>
 </hdr:Header>
 <hdr:Payload>
  <cer:CERS xmlns:cer="http://www.exchangenetwork.net/schema/cer/1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xsi:schemaLocation="
http://www.exchangenetwork.net/schema/cer/1 http://www.exchangenetwork.net/schema/cer/1/index.xsd">
   <cer:UserIdentifier>youruserid.gov</cer:UserIdentifier>
   <cer:ProgramSystemCode>yourPSC</cer:ProgramSystemCode>
   <cer:EmissionsYear>2011</cer:EmissionsYear>
  </cer:CERS>
 </hdr:Payload>
</hdr:Document>
```

# Submitting Your Data

- Export these staging tables into an xml file using the Bridge Tool
- Zip the above created xml file, and your data files into one package.
- Submit using the Web Client or your node.
- EACH SUBMITTAL IS AN ENTIRE REPLACEMENT OF PREVIOUS ONE

### What Will Be Checked

- QA checks on:
  - Limited checks will be done on the NCD tables
  - No checks will be done on the external reference files, but naming convention and presence are checked.
  - THE REJECTION OF ANY ACTIVITY DATA WILL CAUSE THE REJECTION OF THE ENTIRE SUBMISSION

# What EPA will do with submittals

- Collect and compile submitted NCD
- Do QA checks
- Contact agencies with questions
- Run NONROAD via NMIM model for CAP/HAP at monthly or finer level
- Load emissions into EIS

### **Emissions Submittals**

- Agencies may submit emissions, but inputs are preferred
- Multiple emissions data are accessible in EIS. If an agency submits, EPA and SLT data will be present.

### Nonroad Emissions Submittals

- Requirements for submitting onroad emissions inventory
  - CERS
  - Exchange Header
  - Location
  - Emissions Process
  - Reporting Period
  - Emissions
- Optional
  - Excluded Location Parameter

### Required - CERS

- Required
  - User ID (EIS login)
  - Program System Code
  - Emissions Year
- Optional
  - Model
  - Model Version
  - Emissions Creation Date
  - Submittal Comment

### Required - Exchange Header

### Required

- Author Name (not ID)
- Organization Name
- Document Title (EIS)
- Data Flow Name (EIS\_v1\_0)
- Submission Type (QA or Production)
- Property-Data Category (Nonroad)

### Optional

- Keywords
- Comments
- Property-NCD Data File (Sample\_submission\_file.zip
   Only when submitting NCD)

### Required - Location

- Required
  - State/County FIPS or Tribal Code

- Optional
  - Census Tract Identifier
  - Shape Identifier
  - Location Comment

### Required - Emissions Process

- Required
  - State/County FIPS or Tribal Code
  - Source Classification Code
  - Emissions Type Code
- Optional
  - Census Tract
  - Shape Identifier
  - Process Comment

### Required - Reporting Period

### Required

- State/County FIPS or Tribal Code
- Source Classification Code
- Emissions Type Code
- Reporting Period Type Code

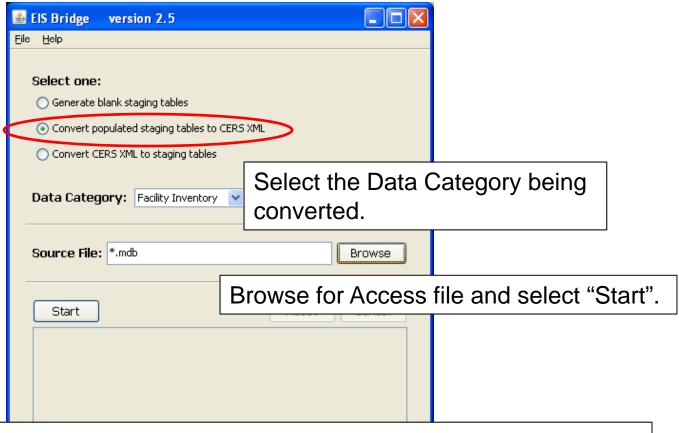
### Optional

- Census Tract and Shape Identifier
- Calculation Data Year Only Onroad
- Calculation Data Source Only Onroad
- Reporting Period Comment

### Required - Emissions

- Required
  - State/County FIPS or Tribal Code
  - Source Classification Code
  - Emissions Type Code
  - Reporting Period type Code
  - Pollutant Code
  - Total Emissions and UOM
- Optional
  - Census Tract and Shape Identifier
  - Emissions Comment

# Creating XML File via the Bridge Tool



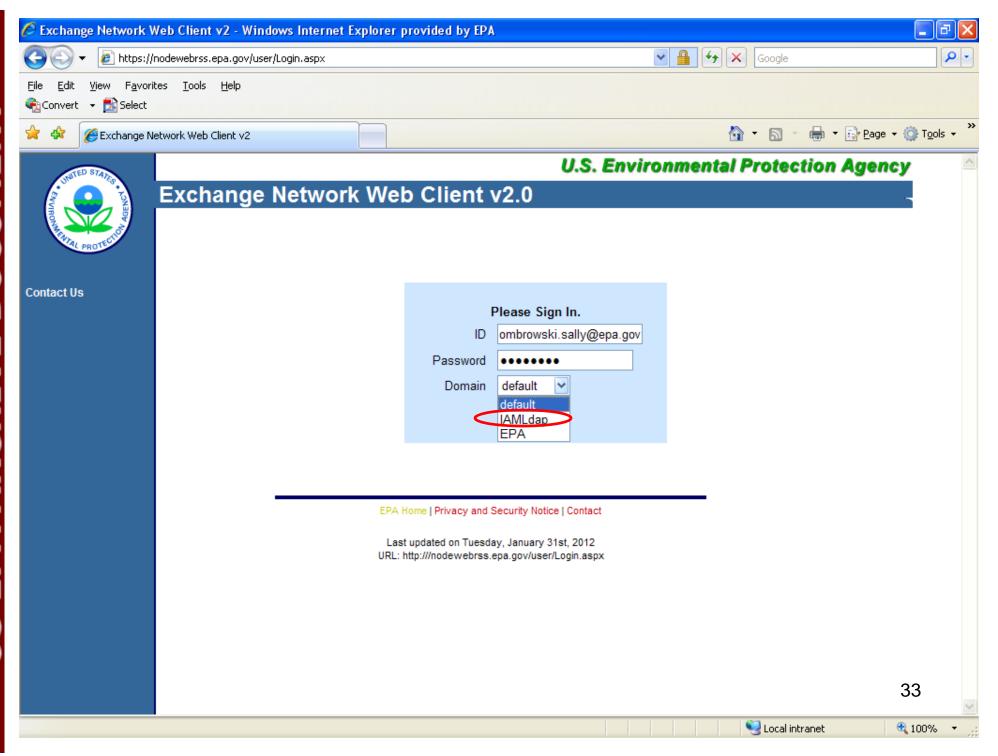
**REMEMBER**: The Bridge Tool works on Access 2003. If your file is saved as Access 2007 or later, you will need to do a "save as" to Access 2003 prior to using the Bridge Tool.

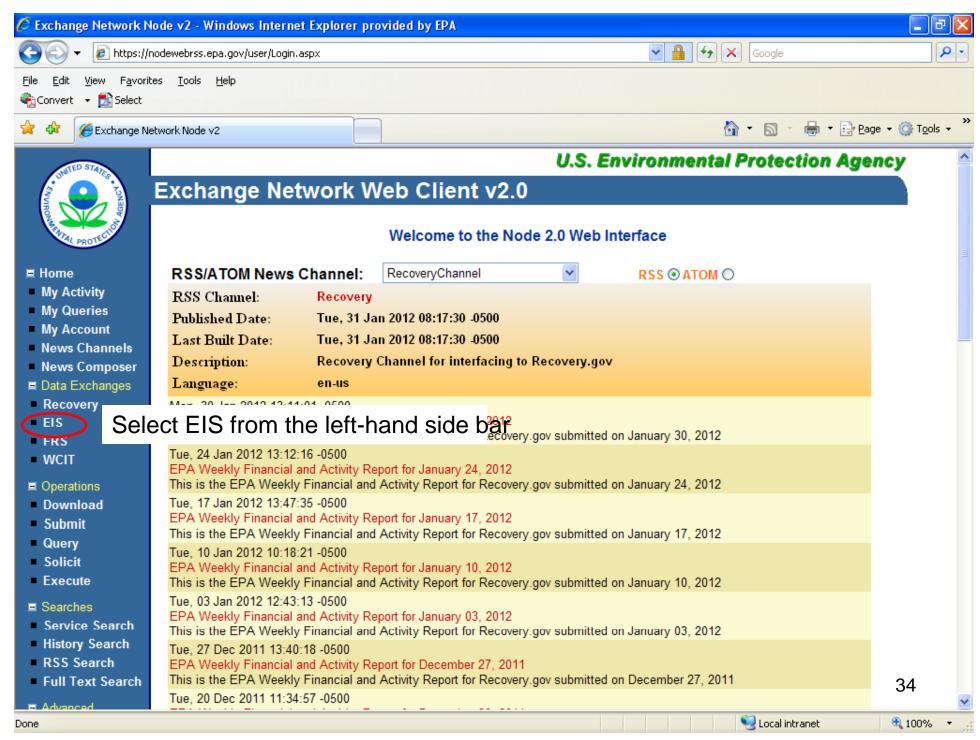
### Common Bridge Tool Errors

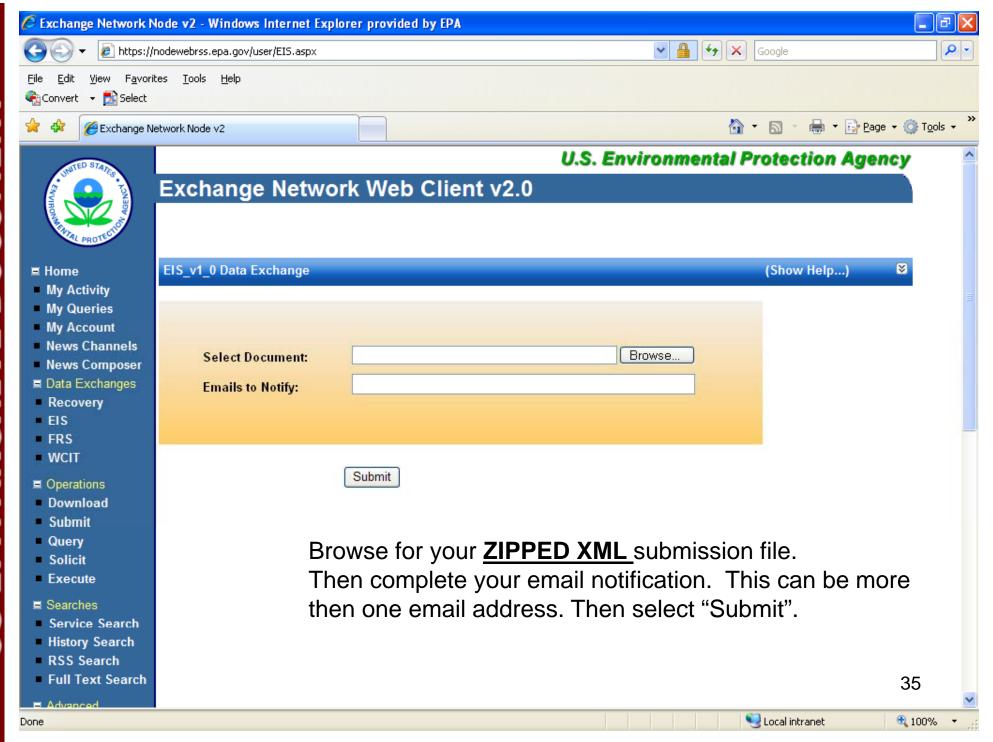
 Look at your xml file prior to zipping it using Note Pad or your web browser.
 Make sure you see all of the components.

# Submitting the zipped XML File

- Two methods
  - Node-to-node
  - CDX web client (most common method)
    - <a href="https://nodewebrss.epa.gov/user/Login.aspx">https://nodewebrss.epa.gov/user/Login.aspx</a>
    - Use Gateway login and password
- QA and Production Environment
  - QA is always open to check your data. Does not change anything in the EIS
  - Production submission is your official submission and will update the EIS
  - Recommend always sending to QA first







#### **Email Notifications**

- First email, from "CDXNotification", immediate
  - Transaction Status: **Pending**
- Second email, also from "CDXNotification", when EIS completes processing
  - Transaction Status: Completed. Feedback report is available at EIS Gateway
- Third email, from "noreply" (EIS Gateway), on quarter hours
  - Status : Completed or Failed
    - Wrong file submission error Usually a zipped Access file is submitted instead of the xml file
    - Window closed error "User, agency, submission year not authorized"
    - Completed might be for an XML file containing no data
- Go to EIS Gateway and read the Feedback Report and resolve any critical errors and Potential Duplicates

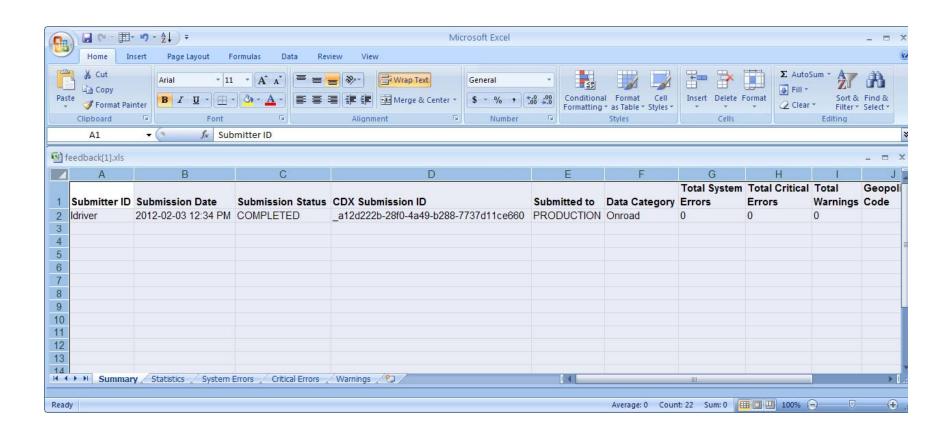
# The Feedback Report

- Summary Page
  - Name of submitter
  - What environment submissions was made to
    - QA or Production
  - Data Category submitted
    - Nonroad
  - Total number of critical and warning errors.

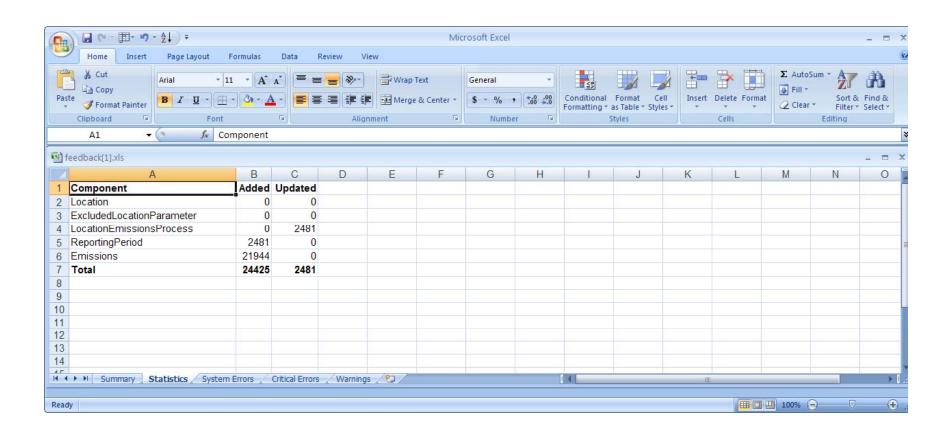
#### Feedback Report Critical Errors

- The most important page of your feedback report
- All critical errors must be resolved prior to submitting to Production

#### Feedback



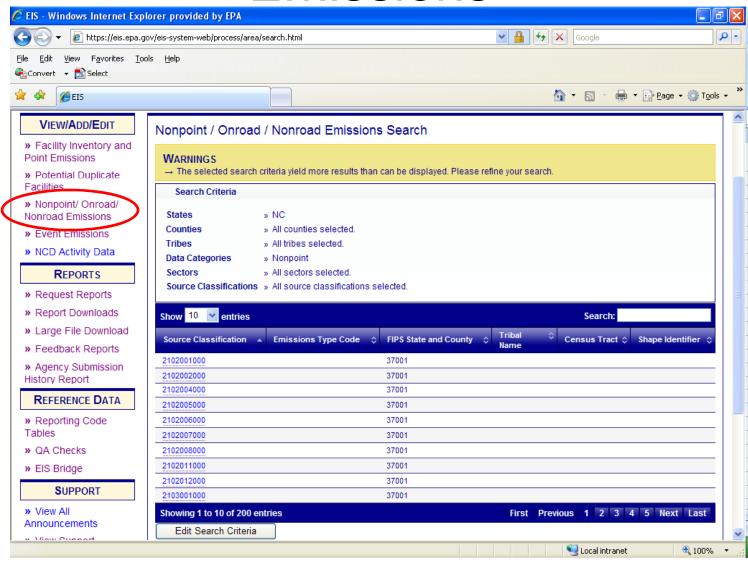
#### Feedback



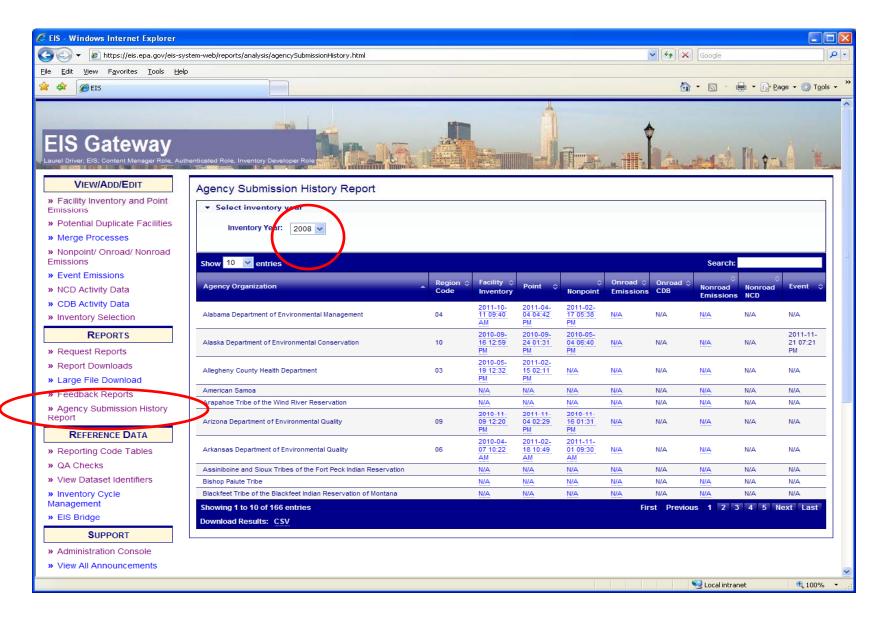
# When will my data show up in EIS?

- Nonroad data on the Gateway is available immediately
- Reports available the next day

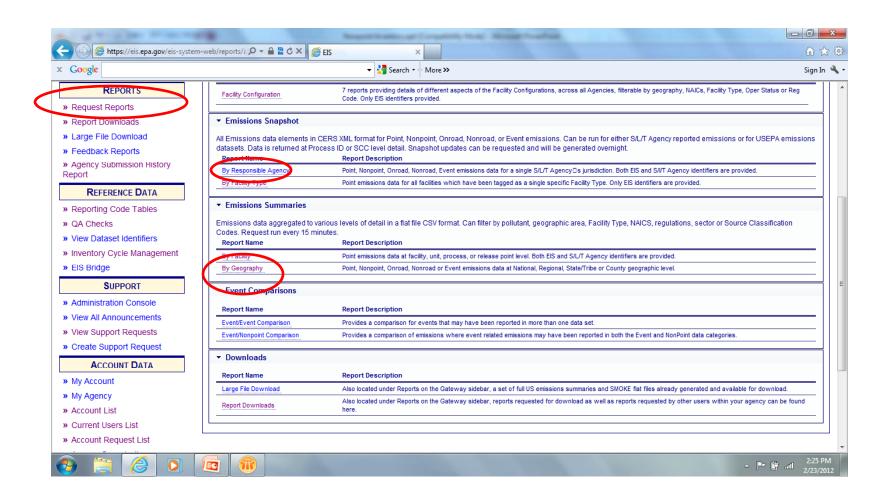
# Nonpoint/Onroad/Nonroad Emissions



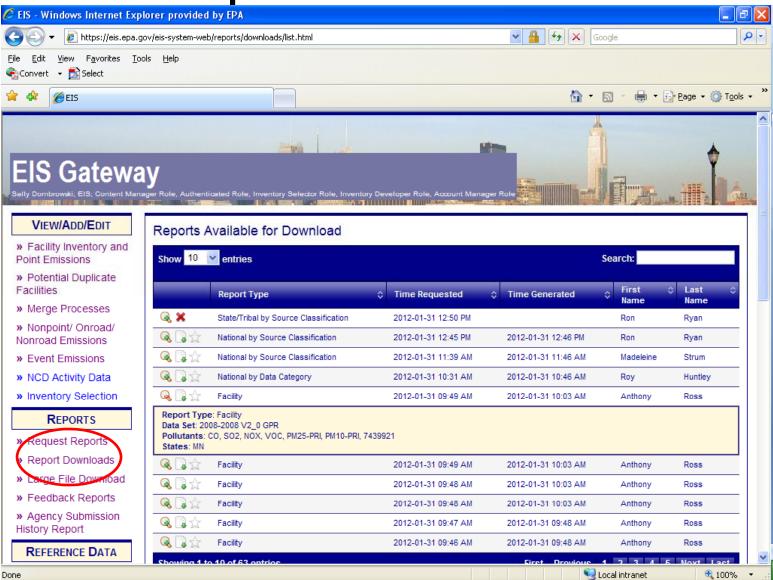
# Agency Submission History Report



# How do I get data out of EIS?



# Report Downloads



# How does EPA Check Your Data?

- Again, inputs are strongly preferred.
- Submitted emissions are compared to EPA's for pollutants covered, disagreement between CAP/HAP, anomalous emis type/pol combinations, SCC coverage, etc.

#### Common Problems

- Overwriting previous submittals. Several submitters in trying to update/correct emissions values, submitted only one pollutant which overwrote previous submittal which contained many pollutants
- Poor use of emission type. For example, all emissions as evap does not make sense.
- Bad emis type/pollutant combinations (e.g., evap pm)

#### Contacts

- Submittal Issues
  - -Sally Dombrowski dombrowski.sally@epa.gov; 919-541-3269
- Inventory Issues
  - Laurel Driver Mobile Sourcesdriver.laurel@epa.gov, 919-541-2859
- NONROAD model Issues
  - mobile@epa.gov